

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059098

Luminaire Tested: S123RDR-S1165D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059098  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1165D835-X4F0-XX-UDD-SVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

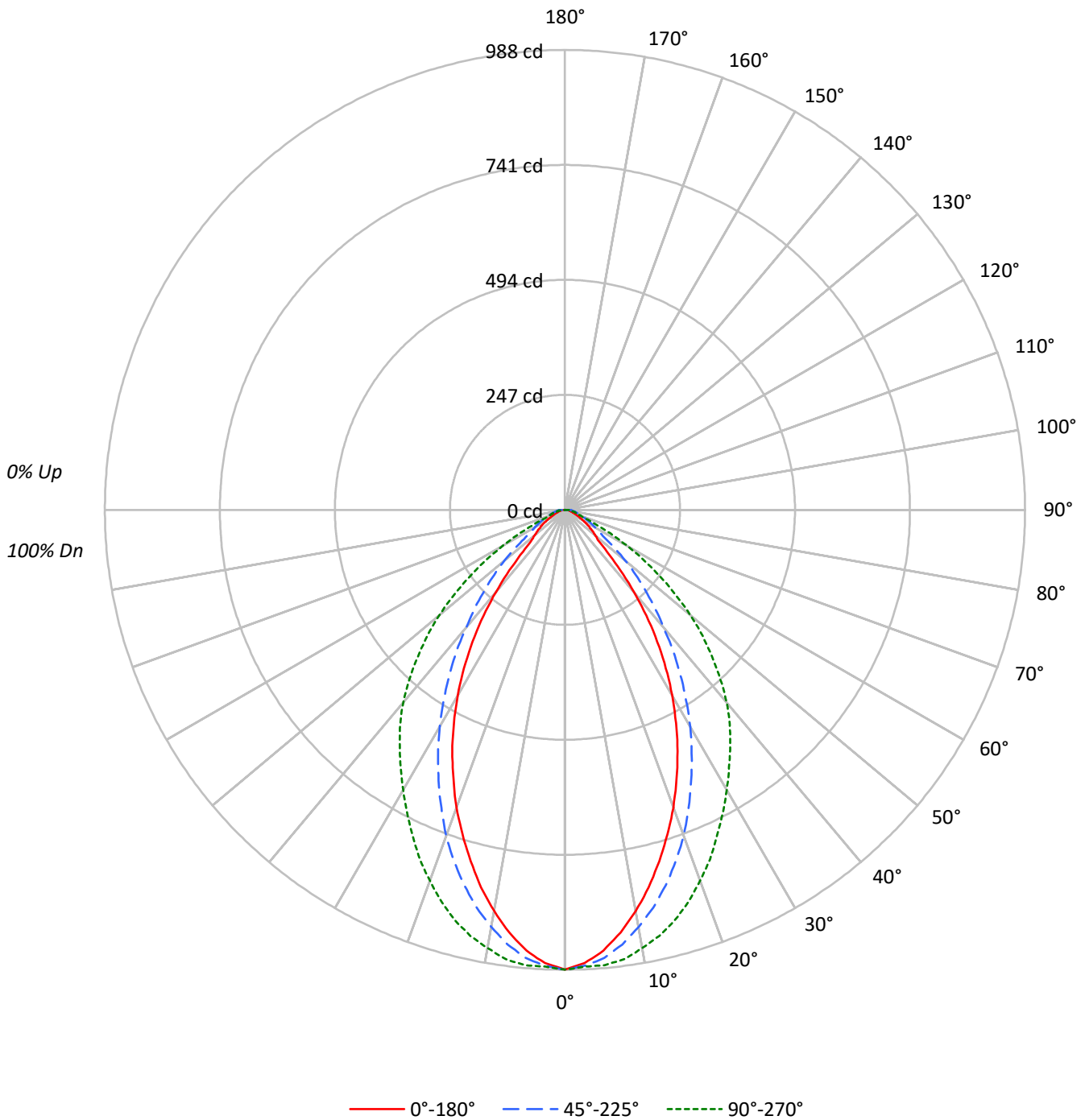
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1322.8 lumens  
Efficiency: N/A  
Efficacy: 31.6 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11598	11598	11598
5°	11200	11388	11575
10°	10437	10849	11399
15°	9500	10150	11095
20°	8505	9316	10595
25°	7416	8314	10014
30°	6237	7292	9424
35°	4961	6180	8868
40°	3536	5040	8288
45°	2107	4047	7423
50°	1555	3082	6427
55°	1298	2096	5108
60°	1050	1726	3588
65°	842	1484	1923
70°	694	1287	1188
75°	653	1243	1112
80°	683	1366	1075
85°	970	1940	1361

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7423 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.7	6.9
10°-20°	235.7	17.8
20°-30°	300.7	22.7
30°-40°	282.9	21.4
40°-50°	203.2	15.4
50°-60°	116.5	8.8
60°-70°	53.3	4.0
70°-80°	26.8	2.0
80°-90°	13.1	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	627.1	47.4
0°-40°	910.0	68.8
0°-60°	1229.7	93.0
0°-90°	1322.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1322.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	950	969	966	973	982	88
15°	782	809	835	880	913	218
25°	572	598	642	711	773	261
35°	346	371	431	529	619	214
45°	127	154	244	359	447	106
55°	63	65	102	189	250	57
65°	30	42	53	59	69	30
75°	14	29	27	24	24	16
85°	7	14	14	13	10	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	987.7	987.7	987.7	987.7	987.7
2.5°	974.7	989.2	980.5	980.5	982.0
5°	950.2	969.0	966.1	973.3	982.0
7.5°	915.6	935.8	941.6	958.9	973.3
10°	875.3	898.3	909.9	937.3	956.0
12.5°	830.6	856.5	875.3	909.9	937.3
15°	781.5	808.9	834.9	879.6	912.7
17.5°	731.1	758.5	791.6	843.5	882.5
20°	680.6	708.0	745.5	800.3	847.9
22.5°	625.8	653.2	693.6	755.6	813.3
25°	572.4	598.4	641.7	710.9	772.9
27.5°	516.2	542.2	589.8	664.7	733.9
30°	460.0	485.9	537.8	618.6	695.0
32.5°	403.7	428.3	484.5	573.9	656.1
35°	346.1	370.6	431.1	529.2	618.6
37.5°	286.9	311.5	382.1	488.8	581.1
40°	230.7	258.1	328.8	448.4	540.7
42.5°	175.9	204.8	285.5	405.2	494.6
45°	126.9	154.3	243.7	359.0	447.0
47.5°	96.6	111.0	206.2	312.9	400.9
50°	85.1	86.5	168.7	271.1	351.8
52.5°	73.5	75.0	131.2	230.7	299.9
55°	63.4	64.9	102.4	188.9	249.5
57.5°	53.4	56.2	83.6	150.0	200.4
60°	44.7	50.5	73.5	113.9	152.8
62.5°	36.0	46.1	63.4	83.6	109.6
65°	30.3	41.8	53.4	59.1	69.2
67.5°	24.5	38.9	44.7	41.8	41.8
70°	20.2	34.6	37.5	34.6	34.6
72.5°	17.3	33.2	31.7	28.8	28.8
75°	14.4	28.8	27.4	24.5	24.5
77.5°	13.0	24.5	23.1	21.6	20.2
80°	10.1	20.2	20.2	18.7	15.9
82.5°	8.7	17.3	17.3	15.9	13.0
85°	7.2	14.4	14.4	13.0	10.1
87.5°	5.8	13.0	13.0	11.5	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)